BRADLEY TOW2 SUBSYSTEM

INTEGRATED SIGHT UNIT (ISU) LAYDOWN

MEDIUM RANGE DIRECTORATE
INTEGRATED MATERIEL MANAGEMENT CENTER

09/11/16 **29 Dec 03**

CONFIGURATIONS

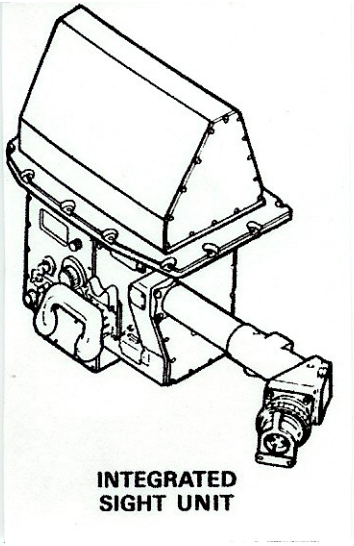
- A0+ (NG/CONUS)
- A2 (TOW2) OIF
- ODS (BELRF) OIF
- LINEBACKER OIF
- BFIST OIF

- **PLATFORM : TACOM SORTS M2/M3 BFV**

- **DEPLOYED: CONUS, KOREA, USAEUR, KOSOVO, BOSNIA, KUWAIT, IRAQ**

- **REPAIR:**
  - TYAD (Electro-Optics)
  - LEAD (Missile Guidance/Launcher)
  - RAYTHEON (TRANS PANELS; SUPPORT EQUIPMENT, SUPER EL CCA)

- **AMCOM MANAGED O&S COST DRIVERS:**
  - BELRF ISU
  - TOW2 ISU
  - TRANSCEIVER PANEL
  - PERISCOPE HEAD ASSY
  - SUPER ELEVATION CCA
  - COOLER
  - TOW VISUAL MODULE



INTEGRATED SIGHT UNIT (ISU): PROVIDES BOTH DAY & INFRARED TARGET ACQUISITION--BOTH CONFIGURATIONS DEPLOYED IN IRAQ

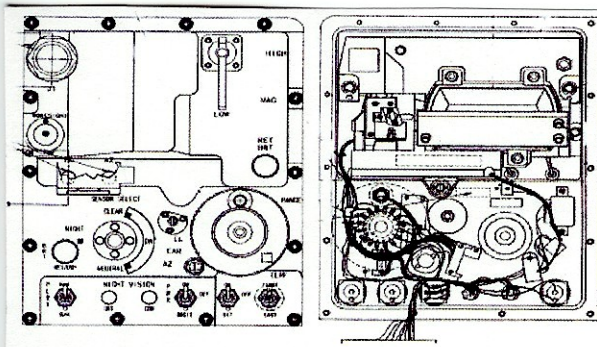
TOW2 1240-01-216-6331 BELRF 1240-01-425-5164

CURRENT SUPPLY POSTURE: RED

TYAD ORGANIC REPAIR ONLY (NOT PRODUCIBLE):

•SHORTAGE OF CRITICAL DEPOT REPARABLES (DAY WINDOW, NIGHT WINDOW, COOLER, TRANSCEIVER PANEL ASSEMBLY, HARNESSES)

•NO UNSERVICEABLES FROM WAR THEATER



TRANSCEIVER PANEL ASSEMBLY: PROVIDES LASER RANGEFINDING CAPABILITY

TRANS PANEL ASSY: 1240-01-444-6570 (PAFDD)

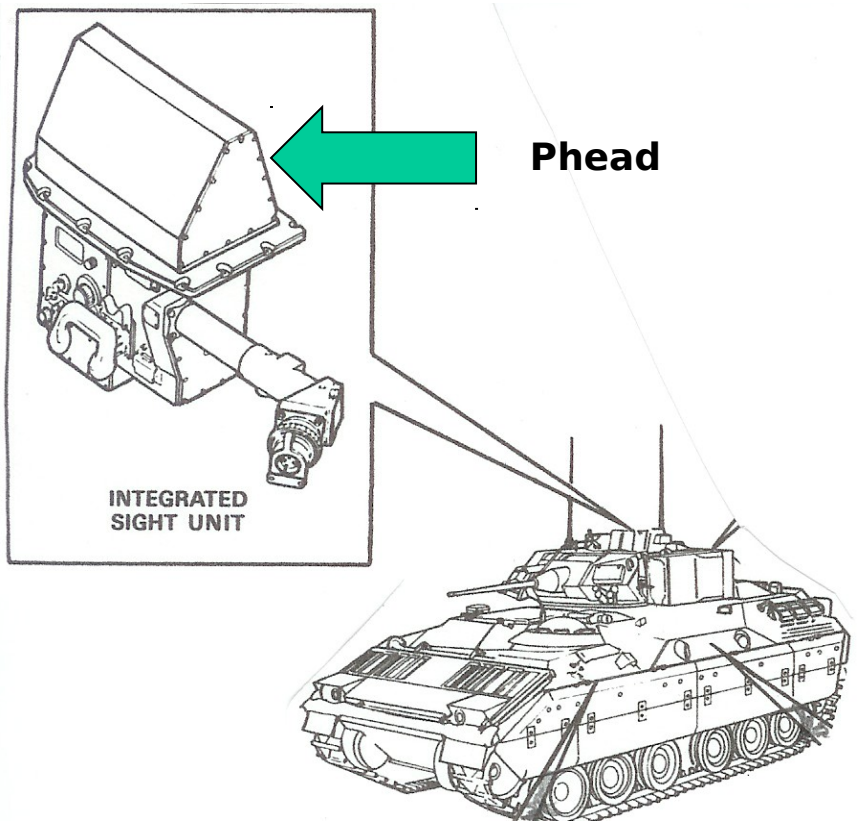
TRANSCEIVER ASSY: 1240-01-444-6571 (PADDD)

TRANS PANEL ASSY REPAIRED AT TYAD; TRANSCEIVER ASSY (Laser) MUST BE REPAIRED AT RAYTHEON, EL SEGUNDO

CURRENT SUPPLY POSTURE: RED

•SOLE SOURCE FOR PROCUREMENT & REPAIR OVERWHELMED CONTRACTOR (Raytheon); FINAL TESTING BOTTLENECK

•NO UNSERVICEABLES FROM WAR THEATER



Bradley Fighting Vehicle

PERISCOPE HEAD ASSY

PERISCOPE HEAD ASSEMBLY: MAJOR LRU OF ISU, ALLOWS DAY AND NIGHT (IR) VIEWING & CONTROLS ELEVATION MIRROR FOR TARGETING.

CURRENT SUPPLY POSTURE RED

TOW2, NSN 1240-01-256-6913, deployed in Iraq

BELRF, NSN 1240-01-463-4581, deployed in Iraq

- DAY WINDOW ONLY DIFFERENCE BETWEEN TOW2 AND BELRF CONFIGURATIONS

- ORGANIC REPAIR PROGRAM AT TYAD; ALL PROGRAMS EXPEDITED PRIOR TO INITIATION OF WAR IN MAR 03

- COMBAT ASL INCREASE WAS UNPROGRAMMED DEMANDS, CREATING MORE BACKORDERS

- LARS & FIELD SERVICE REPS REPORTING INCREASE IN PHEAD FAILURES, ATTRIBUTING MOST TO TORQUE MOTORS (EXTREMELY HOT TEMPERATURES)

- DELAY IN DAY WINDOWS DELIVERY CAUSED DELAY IN PHEAD REPAIR AT TYAD

IMMC BFVS BACKGROUND

GENERAL BACKGROUND

- ISU AND PHEAD ARE HISTORICALLY O&S COST DRIVER FOR BOTH AMCOM & TACOM
- ISU AND PHEAD ARE OUT OF PRODUCTION, LIVING OFF REPAIR
- ATTEMPT TO PROCURE ISU RESULTED IN NO BID BY PRIME CONTRACTOR
- TRANSCEIVER PANEL IS PRODUCIBLE (SOLE SOURCE RAYTHEON, EL SEGUNDO)
- MOST OF THE BFVS LRUs/SRUs HAVE MULTIPLE OBSOLETE PARTS
- COMBAT ASL PLUS UP INCREASED UNPROGRAMMED DEMANDS
- UNSERVICEABLE RETURN RATE 60%; CURRENTLY 0% RETURN RATE FROM IRAQ
- TOW2 ISU PRIMARY FAILURE LRUs: PHEAD, TVM, BSA, SUPER EL CCA
- BELRF ISU PRIMARY FAILURE LRUs: TRANSCEIVER PANEL, SUPER EL CCA, & PHEAD, DEPOT CRITICAL PARTS: TRANSCEIVER ASSEMBLY, DAY WINDOW, NIGHT WINDOW, PHEAD HARNESS, TORQUE MOTORS, ELEVATION MIRROR ASSY, COOLER
- TRANSCEIVER PANEL ASSY IS SOLE SOURCE TO RAYTHEON; SAME VENDOR FOR PROCUREMENT & REPAIR FOR IBAS LASER RANGEFINDER AND ABRAMS'S CIV RANGEFINDER AS WELL AS BFVS BELRF REQUIREMENTS

IMMC BFVS INITIATIVES

INTEGRATED SIGHT UNIT (ISU)

- DISASSEMBLY OF BASIC ISU TO OBTAIN CRITICAL DEPOT REPARABLE PARTS
- EXPEDITED ALL REPAIR PROGRAMS AT TYAD
- EXPEDITED DELIVERY OF DAY WINDOW, NIGHT WINDOW
- NOV 02, INITIATED CONTINUOUS TECHNOLOGY REFRESHER (CTR) PROGRAM FOR REDESIGN OF ISU TO ELIMINATE OBSOLESCENCE & OBTAIN PRODUCIBLE ISU
- LETTER CONTRACT FOR REPAIR OF TRANSCEIVER ASSEMBLIES REQUIRED TO COMPLETE REPAIR OF BELRF ISUS AT TYAD

PERISCOPE HEAD ASSY

- INCREASE IN FAILURES IN IRAQ
  CONDUCTED “PAPER” INVESTIGATION TO ASSIST LARs IN SOLVING INCREASE IN PHEAD FAILURES IN IRAQ.
  SINCE ONSET OF COOLER WEATHER AND SUBSEQUENT DECLINE IN PHEAD FAILURES, CONCLUDED EXTREMELY HOT TEMPERATURES AND OPTEMPO RATE CAUSED MOST OF THE FAILURES

- DISASSEMBLY PROGRAM OF BASIC ISU AT TYAD PROVIDED SOME CRITICAL DEPOT REPARABLE PARTS FOR COMPLETION OF PHEAD REPAIR

- DEVELOPED RFP FOR CONVERSION OF BASIC PHEADS TO BELRF CONFIGURATION WITH PROJECTED AWARD DATE JAN 04 AND DELIVERY OF FIRST ASSETS MAY 04

IMMC BFVS INITIATIVES - CONTINUED

TRANSCEIVER PANEL ASSY

- LETTER CONTRACT AWARDED FOR REPAIR OF LASER ASSY (TRANSCEIVER) –THESE WILL BE SHIPPED TO TYAD TO INCORPORATE INTO NHA (TRANSCEIVER PANEL ASSY), TO COMPLETE REPAIR OF 26 BELRF ISUs. (DELIVERY SCHEDULE 31 DEC 03)

- RFP IN AC FOR REPAIR OF LASER & TRANS PANELS (RAYTHEON RELUCTANT TO ENTER

  INTO LONG TERM CONTRACT BECAUSE OF PARTS OBSOLESCENCE WITH VENDORS

- REDESIGN OF ISU WILL ELIMINATE THIS VERSION OF THE TRANSCEIVER PANEL

RECOMMENDATIONS

- UNSERVICEABLE RETURNS WILL REQUIRE HIGHEST LEVEL ATTENTION AND ACTION, COORDINATION & COOPERATION OF THEATER PERSONNEL
- CONTINUE WITH REDESIGN EFFORT WITH CTR INITIATIVES AND COMMIT SUPPORT AT COMMAND LEVEL (SUPER ELEVATION CCA AND ISU ARE CURRENT PROGRAMS)
- CONTINUE TO COORDINATE AND WORK ESTABLISHING FORWARD REPAIR ACTIVITY (FRA) LOCATED WITH TACOM ARMOR PARTNERSHIP (TAP) FORWARD IN KUWAIT FOR ISU TEST/REPAIR.
- CONTINUE COORDINATION AND COMMUNICATIONS WITH READINESS REPRESENTATIVES IN WAR THEATER TO ASSIST UNITS WITH PROBLEMS, MONITORING BOTH RECEIPTS AND RETURNS, AND ASSISTING WITH TECHNICAL PROBLEMS
- OBTAIN ACQUISITION CENTER'S COMMITMENT TO AWARD CONTRACT ASAP FOR PERISCOPE HEAD ASSEMBLY REPAIR/CONVERSION RFP
- CONTINUE TO WORK CLOSELY WITH ORGANIC DEPOTS AND DLA TO ASSIST IN ALL AREAS TO IMPROVE REPAIR PRODUCTION RATE
- CONTINUE WITH EFFORT TO ESTABLISH COMPLETE TRANSCEIVER PANEL ASSY REPAIR AT TYAD IN LIEU OF CONTRACTING OUT LASER REPAIR (WILL INVOLVE TEST EQUIPMENT, TRAINING, & DOCUMENTATION PURCHASE). CURRENTLY, RAYTHEON HAS PROPRIATARY RIGHTS TO LASER TO INCLUDE REPAIR.
- CONTINUE TO COMMUNICATE WITH TACOM AND CCWS PROJECT OFFICE TO FIND OTHER AVENUES OF OBTAINING ASSETS (REMAN EXCESS, BASIC BFVS) WHICH CAN BE USED UNTIL UNSERVICEABLES ARE RETURNED

SPECIFIC QUESTIONS FROM V

WHY IS THERE NO FRA TO REPAIR ISU'S IN OIF?

- IN FEB 03, AMCOM PREPARED COST ESTIMATES AND A REQUEST TO ESTABLISH BFVS SUBSYSTEM FRA; NO CALL FORWARD WAS EVER ISSUED BY CFLCC
- DEPOT LEVEL REPAIR PARTS HAVE REMAINED IN CRITICAL STOCK POSTURE. IT DOES NOT SEEM EFFECTIVE TO ESTABLISH AN FRA TO REPAIR ISU'S IN THEATER WITHOUT HAVING SUFFICIENT PARTS AVAILABLE TO DO THE REPAIRS.
- REMOVAL/REPLACEMENT OF SOME PARTS REQUIRE SPECIALIZED DMPE FOR ALIGNMENT AND FINAL TESTING; IN MOST CASES, THIS DMPE IS ONE OF A KIND AND REMOVING FROM THE DEPOT WOULD NOT BE AN OPTION.

RECOMMENDATION UNDER CURRENT CIRCUMSTANCES:

- RETURN OF THE UNSERVICEABLES BACK TO CONUS IS THE BEST OPTION UNTIL STOCKAGE OF PARTS IMPROVES; DEPOTS CAN INDUCT UNSERVICEABLES TO EVALUATE ALL ASSETS TO DETERMINE WHICH ONES CAN BE REPAIRED THE QUICKEST; DISASSEMBLY OF BASIC ISUs AT DEPOT PROVIDE DEPOT LEVEL PIECE PARTS FOR REPAIR
- WHEN FIELD LEVEL LRU'S BECOME AVAILABLE (PHEAD, TRANSCEIVER PANELS), THE FIELD CAN REPAIR THE ISU AND RETURN THE UNSERVICEABLE LRUS IN LIEU OF COMPLETE ISU.

GET WELL PLAN

- TRANSCEIVER PANEL ASSEMBLIES AND PERISCOPE HEAD ASSEMBLIES ARE PRIMARY REPAIR "STOPPERS"
- AMCOM HAS A SPARES BUY IN PLUS REPAIR CONTRACT WITH RAYTHEON, EL SEGUNDO FOR TRANS PANELS
- AMCOM HAS RFP FOR CONVERSION OF 100 BASIC PHEADS TO BELRF PHEAD (EST DELIVERIES TO BEGIN SEP 04)